



# **Supply Chain Management and Ethical Sourcing**

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# The Important of Supply

Managing the provision of the resources necessary to conduct the operations of the organisation – a function variously called purchasing, procurement, buying, and materials management (it doesn't really matter which term we use) – is now increasingly a matter of competing for scarce commodities which may differentiate the product or service in the eyes of the customer or consumer.

# Supply Cha



→ **Manufacturer** → **Distributor**

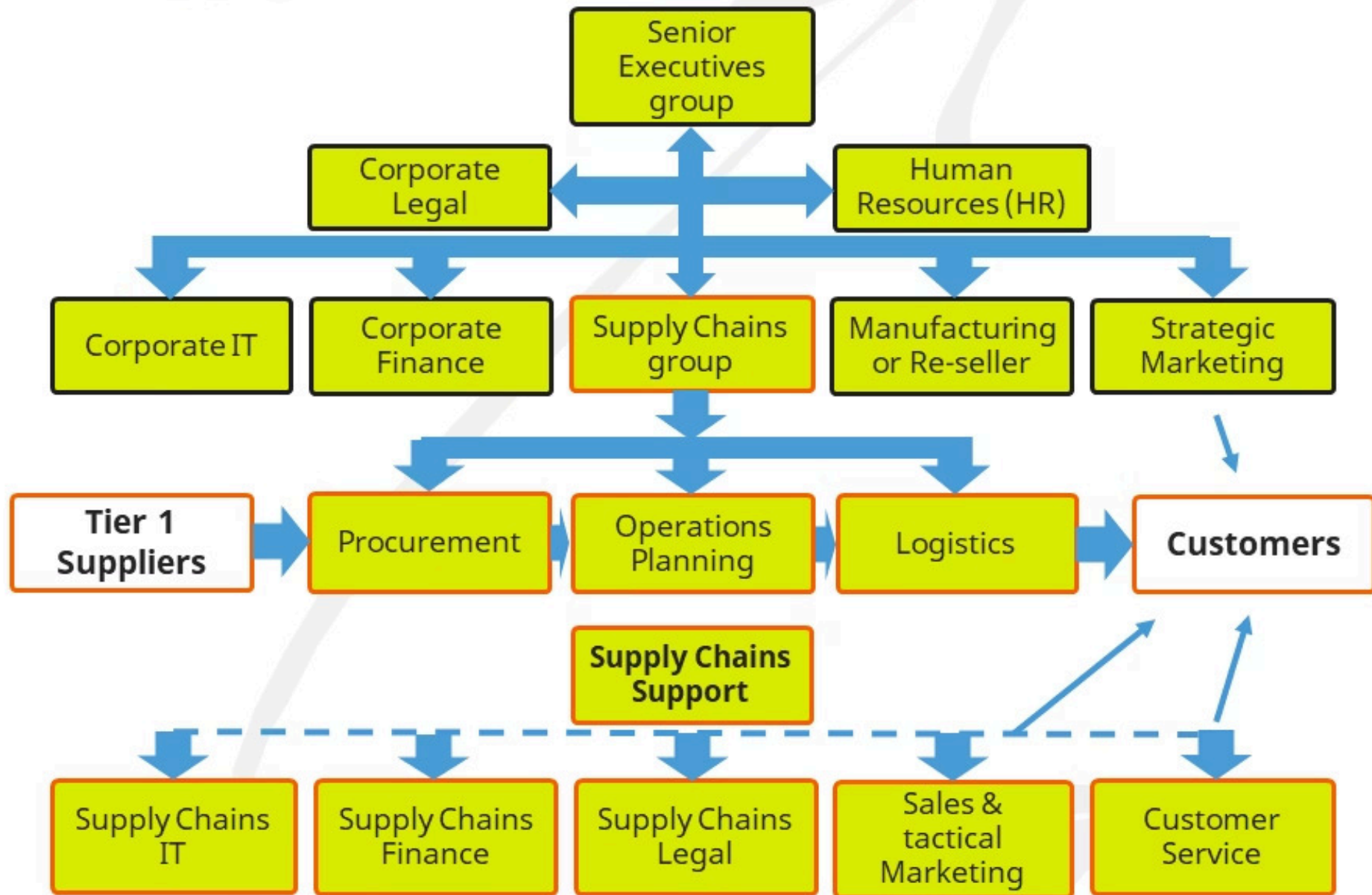


# Supply Chain Structures

Supply chain structures are the strategic, multi-tiered networks of suppliers, manufacturers, distributors, and retailers that facilitate the flow of goods, information, and finances from raw materials to the final customer. These sophisticated networks are designed to optimize operational efficiency through the seamless coordination of physical, financial, informational, and reverse flows — forming the backbone of modern commerce and global trade.

# Supply Chains Organization Structure

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# Key Dimensions and Models

Understanding how a supply chain is structured requires examining it across two fundamental dimensions — horizontal breadth and vertical depth — alongside the functional model that governs its operational philosophy.

## Horizontal Structure

Refers to the **number of tiers** (layers) in the supply chain. A "short" chain has few intermediary steps between raw material and customer, while a "long" chain passes through many stages — each adding complexity and coordination demands.

## Vertical Structure

Refers to the **number of suppliers or customers within each tier**. A narrow structure implies few partners and tighter vertical integration, while a wide structure leverages extensive sourcing across many entities for flexibility and redundancy.

## Functional Supply Chain Models



### Efficient

Focuses on minimizing costs, optimizing capacity utilization, and eliminating waste across every process stage.



### Responsive

Prioritizes speed and flexibility to rapidly meet volatile, unpredictable customer demand patterns.



### Agile

Combines responsiveness with high-volume customization, adapting quickly to shifting market conditions.



### Continuous Flow

Best suited for stable, high-volume products where consistent throughput and predictability are paramount.

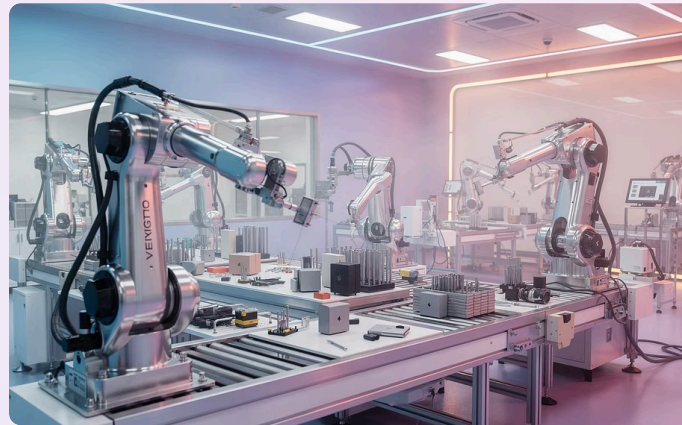
# Key Elements of the Structure

Every supply chain is built from a set of essential participants, each playing a distinct role in moving goods from origin to the end consumer. Understanding these roles is critical for designing networks that are resilient, cost-effective, and responsive.



## Suppliers

Provide the raw materials or components that serve as the foundation for all downstream production and assembly activities.



## Manufacturers

Transform raw inputs into finished goods through production processes, adding value at every stage of assembly and quality control.



## Distributors & Wholesalers

Store, sort, and distribute products in bulk to retailers or other intermediaries, bridging the gap between production and point of sale.



## Retailers

Serve as the final touchpoint, selling products directly to end consumers through physical or digital storefronts.



## Logistics Providers

Handle the transport, warehousing, and movement of goods across every tier — the connective tissue that keeps the chain flowing.

# Core Flows

Three fundamental flows animate every supply chain structure, each moving in distinct directions and carrying different types of value. Mastering these flows is what separates high-performing supply chains from the rest.



## Product Flow

**Physical goods moving downstream** — from raw material suppliers through manufacturers, distributors, and retailers, ultimately reaching the end consumer. This is the tangible movement of inventory across the network.

## Information Flow

**Data moving in both directions** — demand forecasts, order statuses, inventory levels, and market intelligence travel upstream and downstream, enabling coordination and informed decision-making at every tier.

## Cash Flow

**Payments moving upstream** — from the end consumer back through retailers, distributors, and manufacturers to suppliers. Efficient cash flow management ensures financial health and strong supplier relationships.

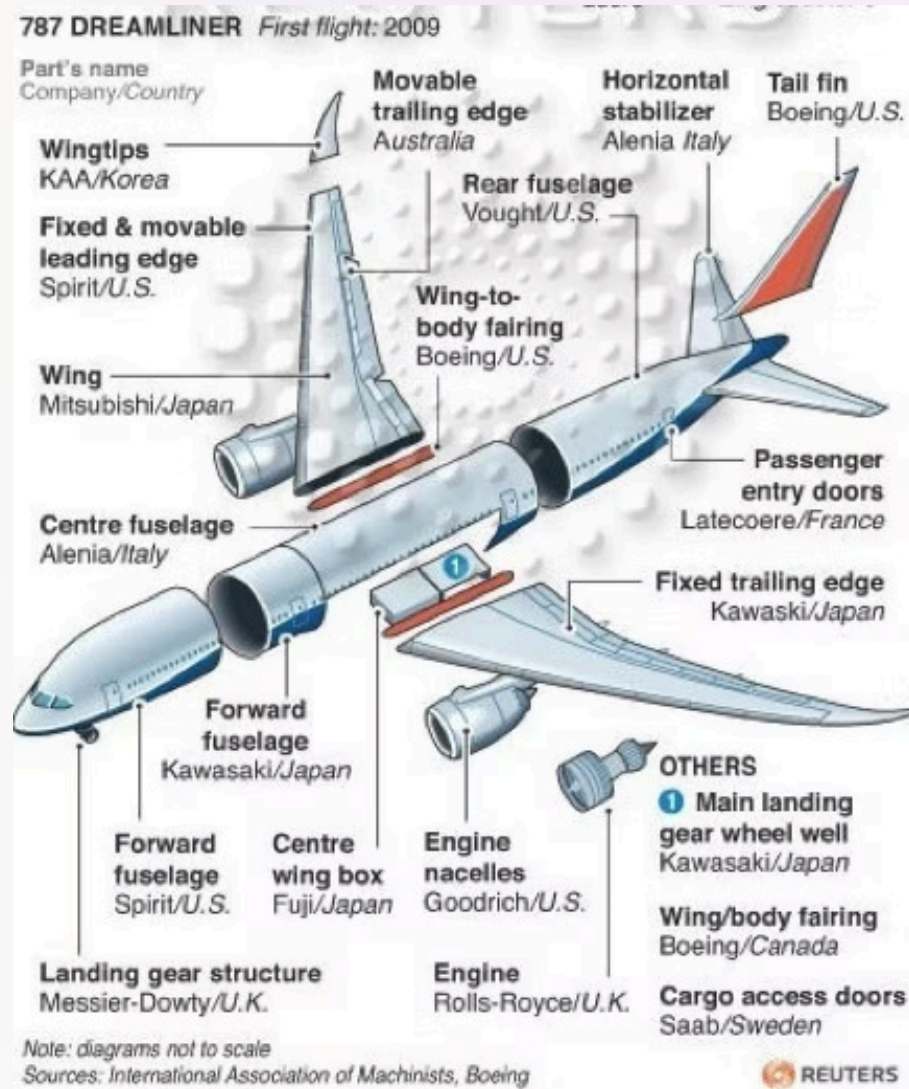
These networks can be configured based on strategic goals — whether the priority is **cost reduction**, **responsiveness to customer demand**, or **risk management**. The optimal structure depends on your organization's competitive strategy and market environment.

# The strategic Important of Supply over time



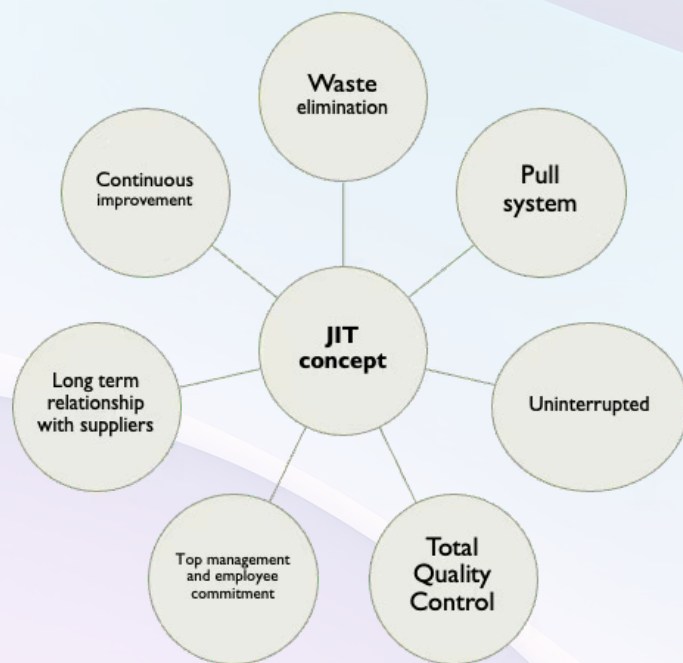
For business (and therefore for Operations Management) the current importance of supply chains can be linked to the rise of international *mass production* in the early part of the twentieth century. As North American manufacturers began to assemble products, most notably automobiles, in several, geographically distant, locations, they created ‘networked’ organisations.

# Global supply network for airline industry



This made it necessary to transport materials and components from suppliers to assembly plants, to *arrive in time, in the right quantities, to the right specification, at the right cost, and in the right place*. We know that many supply chains (admittedly for relatively simple products by today's standards) were well managed a hundred years ago: the much celebrated *just in time* systems, observed in Japan in the 1980s, were in evidence over half a century before, for example, in Ford's assembly plants in the UK.

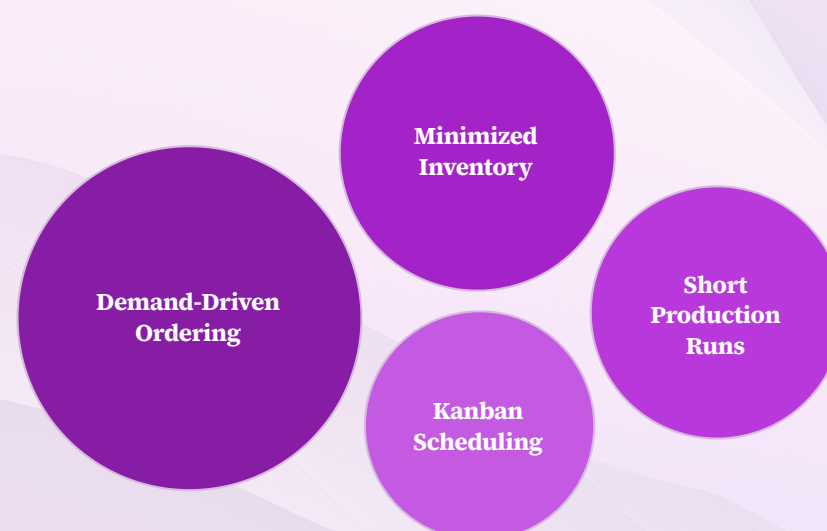
# What Is Just-in-Time (JIT)?



The just-in-time (JIT) inventory system times the arrival of materials so companies only receive what they need exactly when production calls for it, helping them reduce waste and lower holding costs. This method hinges on accurate demand forecasting, seamless supplier coordination, and reliable production scheduling.

## How the JIT Process Functions

- **Demand-Driven Ordering:** In a JIT system, manufacturers typically order parts only after a customer order is received. For example, a car assembly plant might receive airbags exactly as the vehicles requiring them move onto the assembly line rather than keeping a shelf full of inventory.
- **Minimized Inventory:** By receiving materials only as needed, companies minimize inventory levels, which significantly reduces storage costs and the risk of being left with unwanted stock if an order is canceled.
- **Short Production Runs:** JIT allows for short production runs, enabling manufacturers to move quickly between different products to meet changing demands.
- **The Kanban System:** Many companies use Kanban, a Japanese scheduling system, alongside JIT. Kanban helps identify problem areas by measuring lead and cycle times and setting upper limits for work-in-process to avoid overcapacity.



# Ethical Sourcing and Fair Trade

Beyond efficiency and cost, modern supply chains are increasingly judged by their social and environmental impact. Ethical sourcing and fair trade represent critical pillars in building responsible and sustainable global networks.

## Ethical Sourcing

Encompasses a broad commitment to responsible practices across the entire supply chain, ensuring that goods are produced without exploitation. This includes fair labor conditions, environmental protection, transparency, and anti-corruption measures at every stage.

## Fair Trade Principles

A certified movement focused on empowering producers in developing countries. It guarantees fair prices for goods, safe and healthy working environments, direct and transparent trading relationships, and investments in community development initiatives.



# Fair Trade Coffee: Empowering Growers

Fair Trade certification transforms the coffee industry by ensuring growers receive equitable prices and implement ethical labor and sustainable environmental practices. This model directly benefits small-scale farmers and their communities, fostering a more responsible global supply chain.



## Stable Income

Guarantees a minimum price, shielding farmers from volatile global markets and providing financial security.



## Environmental Stewardship

Promotes sustainable farming, protecting ecosystems and biodiversity through responsible land use and less chemical dependency.



## Community Investment

Premium funds are allocated for local development projects, improving education, healthcare, and infrastructure.

# Fair Trade Coffee



## Fair Trade Certified™ Coffee



# Discussion Questions

1. Coffee producers face significant barriers, including pricing volatility, climate-driven weather events, and a lack of capital. How does the Fair Trade certification specifically help farmers overcome these barriers to build more sustainable livelihoods?
2. How does Fair Trade certification help a brand "mitigate potential reputational risk" such as undetected labor violations in its supply chain?
3. Trade USA launched the "Innovation for Impact Initiative" in 2023. Why is it necessary for organizations to continually innovate their certification models, and what value does a "multi-stakeholder engagement" approach bring to the coffee industry?



💡 FUTURE TRENDS

# The Future of Supply Chain: Key Trends

The global supply chain landscape is rapidly evolving, driven by technological advancements, environmental imperatives, and shifting consumer expectations. Future-proofing your supply chain requires embracing these transformative trends.



## Digital Transformation

Leveraging AI, IoT, and blockchain for enhanced visibility, automation, and predictive analytics across the entire network.



## Sustainability & Circularity

Adopting eco-friendly practices, reducing waste, and designing for circular material flows to minimize environmental impact.

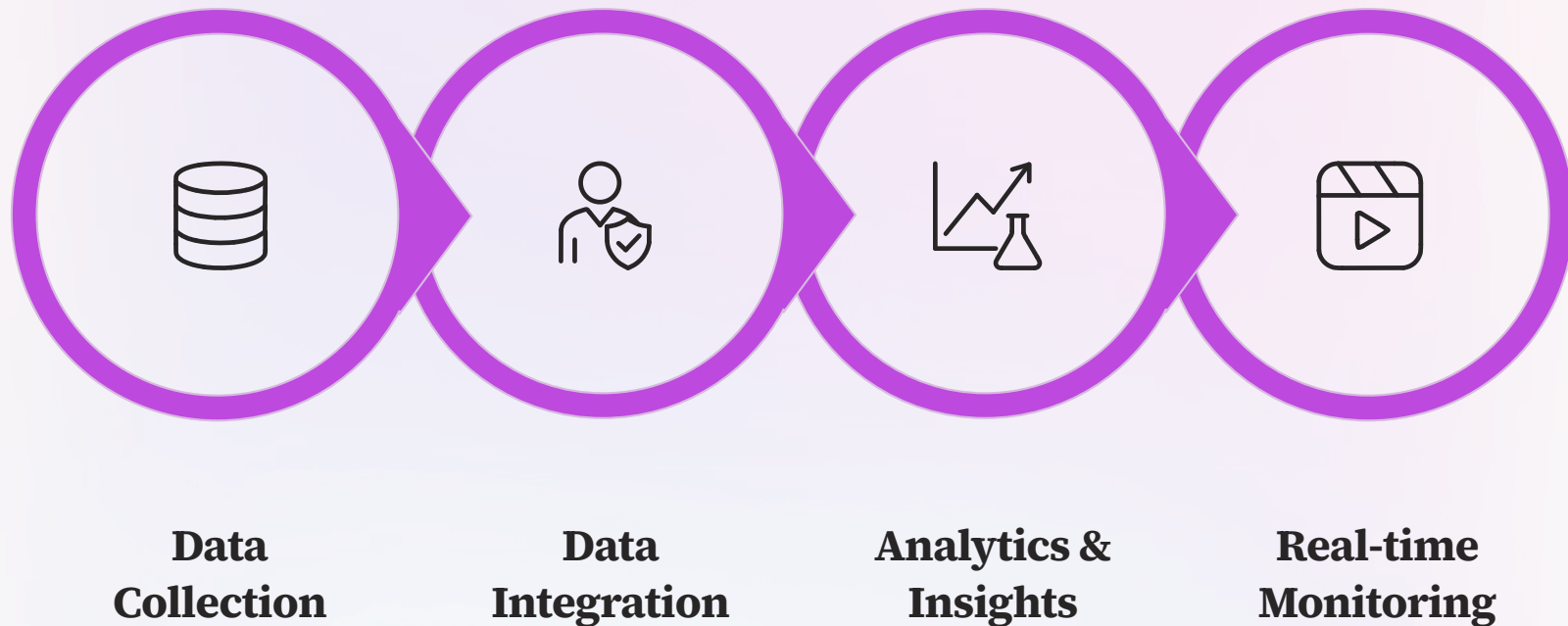


## Resilience & Agility

Building robust and adaptable networks capable of mitigating disruptions and responding swiftly to unforeseen challenges.

# Supply Chain Visibility & Traceability

In today's complex global landscape, understanding the journey of every product, from raw material to consumer, is paramount. Visibility and traceability are no longer just an advantage but a necessity for robust and resilient supply chains.



Implementing these steps allows businesses to proactively manage risks, ensure compliance, optimize logistics, and build consumer trust through transparent operations.

# Future of Supply Chain



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